

MULTICASTING SYSTEMS USING DISTRIBUTED USER AUTHENTICATION

Field of the Invention

This invention relates to multicasting systems, and more particularly,
5 methods and systems for user authentication in these systems.

Background of the Invention

The availability of the Internet, and its ability to access very large numbers
of computers, has spawned a wide variety of Internet services. These include
10 services that provide live programming as well as services that transmit stored
video data in a variety of formats such as MPEG, AVI, RMV, RealPlayer, etc.,
images, multiparty messaging, etc. Live programming services include
teleconferencing, live video events such as sporting events, concerts, etc.
Stored program services include content such as movies, TV programming
15 archives, video clips, or TieVo-like services. In many cases, the service is
provided to many users simultaneously. In those cases the volume of network
traffic required to serve those users can be minimized using multicasting.

Multicasting is used in a variety of network environments where
information is exchanged using data packets, and wherein the data packets from
20 a main centralized server are routed to many subscribed users. In essence,
multicasting allows the main centralized server to send each information packet
once for transport over the wider area network, with multicast routers being used
to make copies of the program stream for each local user port that has